

High prevalence of infection with three recently discovered human polyomaviruses

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A majority of the human population has been exposed to newly discovered KI (KIV), WU (WUV), and Merkel cell (MCV) human polyomaviruses, according to a new study by researchers at the University of Colorado. Published March 27 in the open-access journal *PLoS Pathogens*, the results, based on antibody measurements in serum samples, also suggest that infection with these viruses occurs early in childhood.

For over 30 years, scientists have known about two human polyomaviruses, BKV and JCV. Within the past two years, however, three new viruses have been described that belong to this same virus family. KIV and WUV were detected in nasal secretions, and may be respiratory viruses. MCV was discovered in Merkel Cell carcinomas, a rare [skin cancer](#). Further studies are needed to determine what fraction of the human population has been infected with these viruses and when initial exposure occurs.

In this study, Kean and colleagues tested over 2220 anonymous donor [blood samples](#) (more than 1500 adult and more than 700 pediatric [

The samples and results reported are likely representative of infection in the Denver metropolitan area where they were collected. Future studies will be important to help determine differences in the prevalence of these infections in other geographic areas.

[More information:](#) Kean JM, Rao S, Wang M, Garcea RL (2009)

Seroepidemiology of Human Polyomaviruses. PLoS Pathog 5(3):
e1000363. doi:10.1371/journal.ppat.1000363,
[dx.plos.org/10.1371/journal.ppat.1000363](https://doi.org/10.1371/journal.ppat.1000363)

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